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IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).(71) Applicant (*for all designated States except US*): **BASELL**
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- *of inventorship (Rule 4.17(iv)) for US only*

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: "POLYOLEFIN MASTERBATCH FOR PREPARING IMPACT-RESISTANT POLYOLEFIN ARTICLES"

(57) Abstract: A masterbatch composition comprising (1) 10-50 wt% of a crystalline propylene homopolymer and (2) 50-90 wt% of a blend consisting of (a) a copolymer of ethylene and one or more C4-C10 α -olefin(s), containing 10-40 of C4-C10 α -olefin(s), and (b) an amorphous copolymer of propylene and ethylene. Copolymer (b) has an ethylene content from 20-70 wt%, and an intrinsic viscosity value of the xylene-soluble moiety of from 2.2 to 3.5 dL/g, this value being equal to 0.8 to 1.2 times the intrinsic viscosity value of the xylene-soluble moiety of copolymer (a). The weight ratio of copolymers (a)/(b) is from 3/1 to 1/3. Polyolefin compositions comprising the said masterbatch composition are suitable for the manufacture of automotive parts.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 704 463 A (MITSUI PETROCHEMICAL IND) 3 April 1996 (1996-04-03) example 3	1-10
X	EP 0 884 353 A (ADVANCED ELASTOMER SYSTEMS ; EXXON CHEMICAL PATENTS INC (US)) 16 December 1998 (1998-12-16) tables 1,2	1-10
A	EP 0 832 925 A (MONTELL NORTH AMERICA INC) 1 April 1998 (1998-04-01) table 1	1-10

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0704463	A	03-04-1996	DE 69511023 D1	02-09-1999
			DE 69511023 T2	27-01-2000
			EP 0704463 A1	03-04-1996
			US 5753769 A	19-05-1998
			CA 2157399 A1	12-10-1995
			CN 1130915 A , B	11-09-1996
			DE 69518094 D1	24-08-2000
			DE 69518094 T2	22-03-2001
			EP 0816395 A2	07-01-1998
			WO 9527741 A1	19-10-1995
			US 5969049 A	19-10-1999
EP 0884353	A	16-12-1998	EP 0884353 A1	16-12-1998
			DE 69716717 D1	05-12-2002
			JP 11060847 A	05-03-1999
EP 0832925	A	01-04-1998	US 6048942 A	11-04-2000
			AT 202588 T	15-07-2001
			AU 721480 B2	06-07-2000
			AU 3931097 A	02-04-1998
			BR 9704929 A	01-09-1998
			CA 2217165 A1	30-03-1998
			CN 1185458 A	24-06-1998
			DE 69705373 D1	02-08-2001
			DE 69705373 T2	15-11-2001
			EP 0832925 A1	01-04-1998
			ES 2158417 T3	01-09-2001
			JP 11001585 A	06-01-1999
			PL 322371 A1	14-04-1998
			RU 2194726 C2	20-12-2002
			SK 131297 A3	10-03-1999
			TR 9701086 A2	21-04-1998